

not the result of any inflammatory alterations affecting the optic nerves in their intra-cranial course, but is due to the hydrocephalus, which is a frequent complication of acute meningitis, and which always accompanies the neuritis. The œdema of the optic nerve that characterizes the alteration, improperly designated neuritis, appears to us to be of the same nature as the cerebral œdema observed under the same conditions, and produced by an obstruction to the lymphatic circulation.

SENILE TREMOR.—At the session of the Soc. Méd. des Hopitaux, July 13, (rep. in *L'Union Médicale*), M. Luys offered a communication in regard to that special form of trembling which is usually described as peculiar to old age, and is known under the title of senile tremor. He maintained that this as a distinct form, and as peculiar to old age, did not really exist; in ten years careful observation of senile pathology in his service, both in the Bicetre and in the Salpêtrière, and he had never observed any tremor in healthy old persons. He considered that senility was by no means necessarily accompanied with tremor. He had had, among others, under observation, a woman ninety-nine years of age who showed no signs of tremor. He attributed the partial tremors which existed in certain cases in the muscles of the hand and those of the neck, to incomplete forms of paralysis agitans, and to localized sclerosis in certain portions of the medulla or the pons.

THE HEAD SYMPTOMS IN LOCOMOTOR ATAXY.—The following is the analysis of a recent memoir by Dr. A. Pierret (52 pp. Paris, J. B. Baillière 1877) as given in *La France Médicale*, No. 79, 1877.

For many years M. Pierret has studied locomotor ataxy in point of view of localization. He had already reached the result that the posterior column of the cord, in man, must be divided into two regions, physiologically distinct, the median bundle and the radicular zones. To the latter appertain all the tabetic phenomena, properly speaking, the fulgurant pains, the anæsthesia, and the inco-ordination of movement; to the former, a sort of flaccid paralysis of the lower members, rendering the upright position difficult or impossible. Locomotor ataxia is, therefore, a symptom, a systematic affection, in the sense that it attacks certain parts of the cord constituting an anatomical system, that of the sensory fibres. It may arise at any part of this system whatever, it is therefore a good idea to seek to find in the entirety of the nervous system those regions which physiologically represent the posterior radicular zones of the spinal axis. For this purpose M. Pierret has given in this *brochure* an anatomical and clinical study of the trigeminus.

The trigeminus nerve, in its soft or sensory portion, must be considered as representing the posterior roots of nearly all the motor nerves of the face. Indeed, as M. Pierret shows, this sensory root takes its rise on the prolongation of the posterior radicular zones of the spinal cord. On the

other hand, we find, in a certain number of cases, functional lesions of the trigeminus in the course of locomotor ataxy. This nerve acts in all ways like a posterior root.

The cephalic disorders of locomotor ataxy, depend either upon sensibility or motility; the author studies successively these two orders of symptoms.

The pains of the face are of the fulgurant and persistent and continuous types. The orbital branches are the ones most frequently involved. The pains often leave after them a zone of hyperæsthesia. The continuous pain is the most frequent, it exists around the orbits; when more generalized it may simulate a hemicrania, so much the more in that it is accompanied with photophobia, flow of tears and vaso-motor disorders. The eye itself is not free from these pains, and certain patients have asked that theirs be extirpated. In certain cases there exists at the same time anæsthesia of the mucous membrane and of the skin.

The paralysis and pseudo-paralysis which show themselves in the course of locomotor ataxy may affect all the muscles; they are transitory or little pronounced. The author notices in this connection how the integrity of the centripetal system is essential for the good execution of the movements of the life of relation, and also how direct are the relations between the posterior, spinal or bulbar (trigeminal) roots and the corresponding motor roots (cranial nerves). But the original cause of locomotor ataxia appears to be an irritation located primitively in the sensory fibres of the nervous system; we ought not therefore to be astonished at the appearance of paralysis of sensory origin in the domain of the motor nerves of the trigeminal group.

We may also observe motor inco-ordination of the muscles innervated by the motor branches of the trigeminal group.

Paralyses are more frequent in the muscles of the members or in those of the eye, but, on account of their locality and their frequently transitory nature, they are sometimes difficult to observe. It is therefore an error to suppose that ataxia of movement is independent of all paralysis.

The one that is left of all the theories proposed for the explanation of the co-ordination of movements is the law of Duchenne on the *role* of antagonist muscles. In every muscular movement the forces may be reduced to two, one of which produces the movement, and the other moderates it, and if the movement becomes irregular and exaggerated, it is because one of the two antagonists acts too little, whether it acts on the bone, the eyes, or the skin.

The following are among the recently published papers on the Pathology of the Nervous System and Mind, and their Pathological Anatomy:

BULL, Choked Disk following Injuries to the Head, *Am. Jour. Med. Sci.* October, 1877; MILLS, Spasmodic Torticollis; PITRES, Contribution to the Study of the Anomalies of Sclerosis in Disseminated Patches, *Revue*